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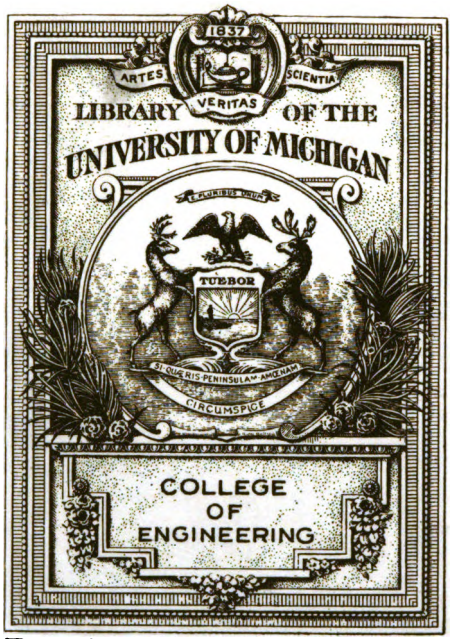

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New England Water Works Association.

INDEX.

TRANSACTIONS, 1883 TO 1885.
JOURNAL, VOLUMES I TO XXIX.
(1882 TO 1915, INCLUSIVE.)

PREPARED UNDER AUTHORITY OF THE
EXECUTIVE COMMITTEE
BY
RICHARD K. HALE,
EDITOR.

BOSTON
The Fort Hill Press
SAMUEL USHER
1916

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FOREWORD.

The New England Water Works Association, from its first foundation, has issued its official publication quarterly. During the years 1883–1885 it published Transactions, a volume for each year. The JOURNAL was established in 1886, and for a time each issue was paged independently, but in Volume III and all succeeding volumes the paging has been made consecutive. Volumes I–XIV begin with the September issue; Volumes XV–XXIX with the March issue.

Proceedings of meetings have not been exhaustively indexed. Some features have been entered under the heading "New England Water Works Association," and a few important addresses have been listed under appropriate headings. Beyond this, few references have been made and one must rely on the index in each volume.

The index is in two sections: a Subject Index and an Author Index. In the Author Index there are listed biographical notices and portraits, as well as articles published over an author's name. For remarks made in the course of discussion, one must consult the Subject Index under an appropriate heading. The Subject Index includes all headings which are not personal names.

Following the title of an article, the author's name is given in parentheses. Illustration is indicated by the abbreviation "Il."

The volume number is shown in Roman numerals of bold-faced type. The page number indicates the first page of an article, or the page where mention of a topic occurs. The date of a volume is shown by the number of the year in parentheses.

Mention of the discussion of an article has seldom been made, as it is of regular occurrence.

The following abbreviations have been used:

Il.: Illustration, illustrated.
Trans.: Transactions.

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Committee on certificate of membership: appointed, **XXVII** 553 (1913).
Committee on charges for fire protection: appointed, **XV** 363 (1901), **XIX** 321 (1905); reports, **XV** 438 (1901); **XVI** 290, 315 (1902); **XVIII** 198 (1904); **XX** 17 (1906).
Committee on control of private fire supplies: appointed, **XVI** 394 (1902); report, **XVII** 425 (1903).
Committee on convention funds rules: appointed, **XXVIII** 564 (1914); report, **XXIX** 235 (1915).
Committee on Dexter Brackett memorial: appointed, **XXIX** 471 (1915); report, **XXIX** 579 (1915).
Committee on engineering coöperation: report, **XXIX** 591 (1915).
Committee on exchange of sketches: appointed, **I Sept.** 16 (1886), **IV Sept.** 9 (1889); reports, **I Sept.** 16 (1886), **I March** 27 (1887), **II Sept.** 22, 86 (1887), **II Dec.** 34 (1887), **III Sept.** 17 (1888).
Committee on extensions of main water pipes: appointed, **XXIII** 450 (1909); report, **XXV** 212 (1911).
Committee on headquarters: appointed, **VI** 11 (1891–92); report, **X** 11 (1895–96).
Committee on leakage of pipe joints: appointed, **XXIX** 468 (1915).
Committee on legislation and other activities relating to conservation: appointed, **XXII** 254 (1908); report, **XXIII** 131 (1909), **XXV** 135 (1911); discharged, **XXVIII** 101 (1914).
Committee on meter rates for water service: appointed, **XVIII** 91 (1904), **XIX** 115, 360 (1905); report, **XIX** 322 (1905), **XX** 237 (1906).
Committee on meter rates and loss of water: appointed, **XXVII** 302 (1913); continued, **XXIX** 229 (1915); reports, **XXVIII** 90, 199 (1914).
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Committee on revision of the constitution: appointed, **XIV** 374 (1899–1900); report, **XV** 207 (1900–01).

Committee on service pipes: appointed, **XXIX** 145, 229 (1915).

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Committee on standard specifications for cast-iron pipe: appointed, **XV** 289 (1900–01), **XXIV** 635 (1910); reports, **XVI** 85, 330 (1902), **XVII** 84 (1903), **XXVI** 170 (1912), **XXVIII** 92, 348 (1914).

Committee on standard specifications for fire hydrants: appointed, **XXI** 494 (1907); conference with committee of manufacturers, **XXIV** 224 (1910), **XXVII** 154 (1913); reports, **XXIV** 205 (1910), **XXV** 137 (1911), **XXVI** 76 (1912), **XXVIII** 89, 184, 194 (1914).

Committee on standardization of fittings for valves. Tabled. **XXIX** 581 (1915).

Committee on statistics of water consumption: appointed, **XXIV** 636 (1910); report, **XXVII** 29 (1913).

Committee on statistics of water purification plants: appointed, **XXVII** 466 (1913); continued, **XXIX** 232 (1915); preliminary report, **XXVIII** 220 (1914).

Committee on statistics of water works: appointed, **VI** 149 (1891–92); report, **VIII** 9 (1893–94).

Committee on uniform classification of water rates: appointed, 147 (Trans. 1885); report, **II Sept.** 32 (1887).

Committee on uniform statistics: appointed, **XV** 289 (1901), **XVI** 61 (1902); reports, **XVI** 51, 263 (1902).

Committee on uniformity in the annual reports of superintendents of water works: appointed, 12 (Trans. 1882), 69 (Trans. 1884); report, II. 118 (Trans. 1885).

Committee on uniformity in the direction of opening hydrants and gate valves and of size and shape of hydrant and gate nuts: appointed, **XIX** 377 (1905); progress report, **XX** 348 (1906), **XXV** 141 (1911); discharged, **XXVI** 74 (1912).

Committee on uniformity of threads for hydrant connections: appointed, **XVIII** 470 (1904); report, **XIX** 385 (1905).

Committee on waste of water: appointed, 12 (Trans. 1882); report, 27 (Trans. 1883).

Committee on yield of catchment areas: appointed, **XXV** 185 (1911); report, **XXVIII** 397 (1914).

Committee to collect data relating to awards for water and water-power diversion: appointed, **XXI** 278, 314 (1907); report, **XXIV** 1 (1910).

Committee to gather statistics upon depth of laying pipes and experiences with broken pipes: appointed, **XXII** 365 (1908); schedule of inquiries, **XXII** 368 (1908); report, **XXIII** 435 (1909), **XXVII** 160 (1913).

Committee to consider the question of legislation making owners of real estate liable for water rates: appointed, **XVIII** 75 (1904); progress report, **XXVIII** 101 (1914).

Committee to secure the passage of a statute in Massachusetts making water bills a lien on real estate: appointed, **XXVII** 547, 553 (1913); report, **XXVIII** 91, 105 (1914).

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WATERFORD, NEW YORK, U.S.A.

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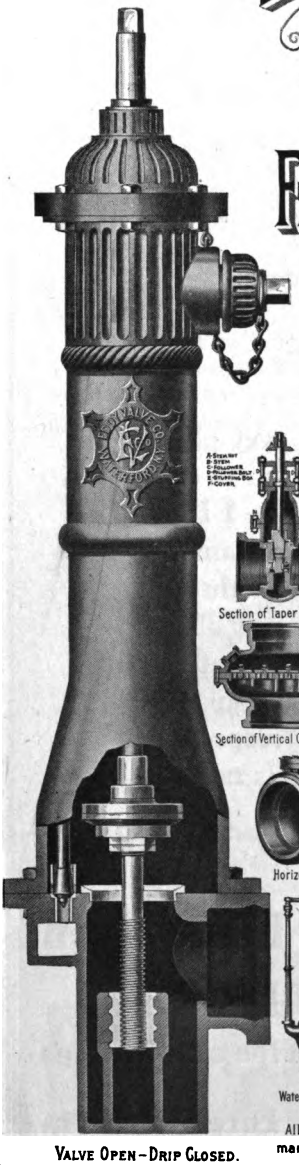
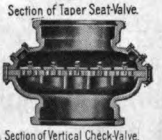
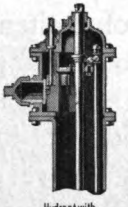
EDDY FIRE HYDRANT



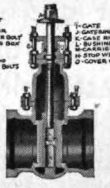
Section of Taper Seat-Valve.



Section of Vertical Check-Valve.



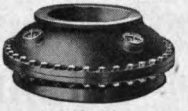
Hydrant with Independent Nozzle Cut-off.



Section of Parallel Seat-Valve.

Section of Vertical Foot-Valve.

Horizontal Check-Valve.



Vertical Foot-Valve.

Hydrant with Water Crane Attachment.

Indicator Post.

Water Crane with Automatic Drip Valve.

VALVE OPEN – DRIP CLOSED.

All Goods made by the EDDY VALVE COMPANY are manufactured exclusively at WATERFORD, N.Y., U.S.A.

VALVE CLOSED – DRIP OPEN.

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(Every Atom Pure Lead)

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For overhead joints, or in wet places where the use of molten lead is not only impracticable, but dangerous — **LEAD WOOL** may be employed to advantage. It makes perfectly tight joints to withstand the highest pressures, yet sufficiently elastic to admit of considerable sagging or settling of the pipe without causing the joint to leak. The difference in this respect, as compared with the poured joint, is notable.

NO FIRE — NO DANGER — NO TROUBLE.

Highest quality Lead Lined Iron Pipe and Fittings

***Also* Pure Block-Tin Lined Iron Pipe and Fittings**

Lead Pipe, Tin Lined Lead Pipe, Pure Block-Tin Pipe, Solder Pig Lead, White Lead and Red Lead

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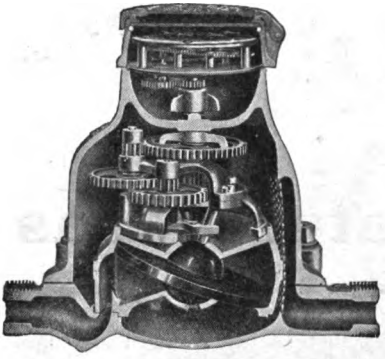
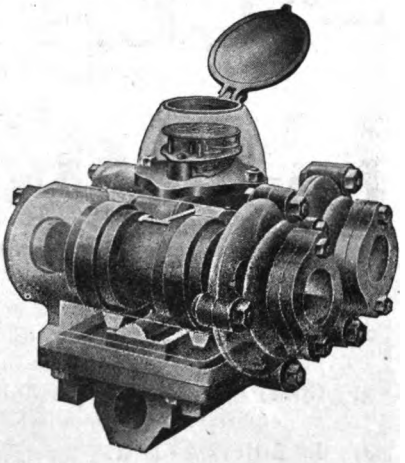
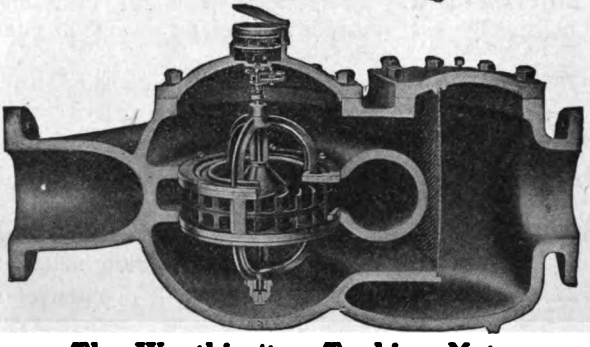
WORTHINGTON METERS

The Worthington Duplex Piston Meter is particularly adapted to large and heavy water works services.





The Worthington Disc Meter combines minimum weight with reliability on constant service and accuracy of registration.



The Worthington Turbine Meter
is designed primarily to handle large volumes of water with minimum loss of pressure.

Full descriptions of the different types of Worthington Meters, with tables of sizes and capacities, are given in Bulletin W184–54.

HENRY R. WORTHINGTON
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W159.8

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Twelve Reasons Why

YOU SHOULD USE

Trade "LEADITE" Mark

Registered U. S. Patent Office

FOR

Jointing Water Mains

1. **DURABILITY.** Leadite joints increase in strength with age.
2. **NO CAULKING.** Leadite joints require no caulking, because the Leadite adheres to the pipe, making a water-tight bond.
3. **COMPARATIVE QUANTITIES.** One ton of Leadite is equivalent to four tons of lead.
4. **LABOR SAVING.** Saves caulking charges and digging of large bell-holes, and reduces the cost of trench pumping to the minimum.
5. **COST.** Its use saves 50 to 65 per cent. over lead, owing to the saving effected in material and labor.
6. **TOOLS.** As no caulking is required, fewer tools are needed.
7. **TRANSPORTATION.** Considerable freight charges are saved because Leadite is lighter than lead.
8. **HAULING.** Saves hauling expense on the work because you move only one fourth the weight of jointing material.
9. **FUEL.** Saves fuel because you melt only one ton of material instead of four, and not as much heat is required either.
10. **DELIVERY.** We can make prompt shipments.
11. **DAMAGE SUITS.** Claims for damages caused by joints blowing out are prevented because Leadite joints will not blow out under any pressure.
12. **USERS.** Progressive water works all over the country use Leadite.

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THE LEADITE COMPANY, Inc.

LAND TITLE BUILDING PHILADELPHIA

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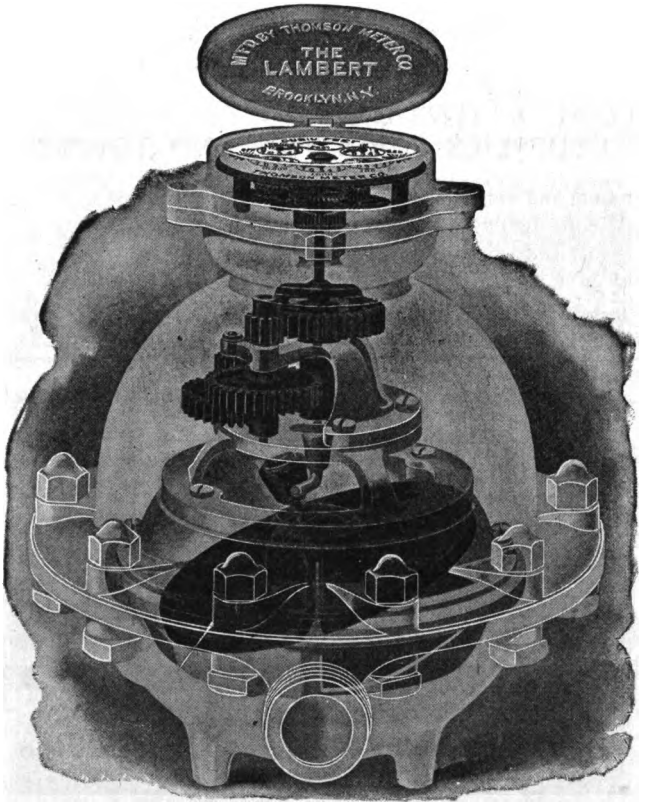
Avoidance of Repairs

Are the Requisites of the Perfect Water Meter and are the Principal Features of the

"LAMBERT."



Our unbreakable disk-piston, reinforced with an internal steel plate, can be found only in the **LAMBERT METER.**

The growing popularity of the water-meter system is attributed by many to the inherent excellence of the **"LAMBERT"** meter. Where **"LAMBERT"** meters are selected, success is assured.

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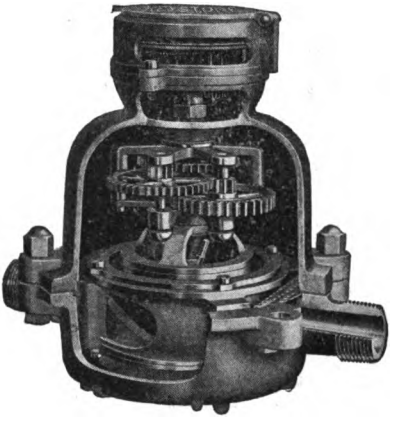

"KEYSTONE" WATER METER

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Keystone and Eureka

Water Meters

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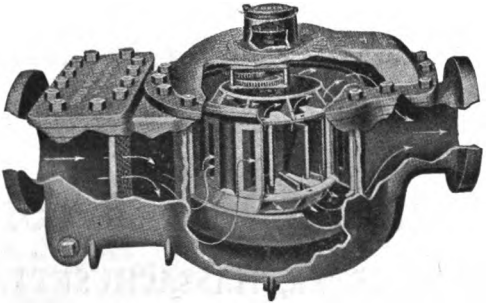

"EUREKA" WATER METER

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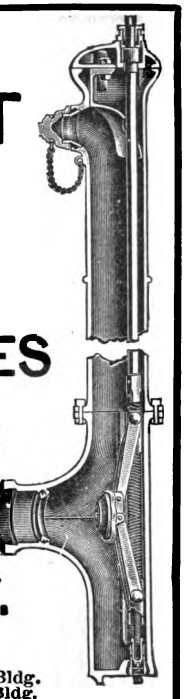

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Water Pressure Regulators
Waste Stops and Corporations

UNION WATER METER COMPANY

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